

## REMARKS/ARGUMENTS

Applicants acknowledge receipt of the Office Action dated April 16, 2009. Claims 1-16 are pending in the application. The Office Action rejects claims 1, 3, 6, 8 and 10 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,442,415 (“*Chao*”) in view of U.S. Patent No. 4,257,694 (“*Reinhard*”) and further in view of U.S. Patent No. 4,030,821 (“*Badalich*”). The Office Action rejects claims 2 and 5 under 35 U.S.C. §103(a) as being unpatentable over *Chao* in view of *Reinhard* and in further view of *Badalich* and U.S. Patent No. 6,837,583 (“*Gishi*”). The Office Action rejects claim 4 under 35 U.S.C. §103(a) as being unpatentable over *Chao* in view of *Reinhard* and in further view of *Badalich* and U.S. Patent No. 5,823,651 (“*Helot*”). The Office Action rejects claim 9 under 35 U.S.C. §103(a) as being unpatentable over *Chao* in view of *Reinhard* and in further view of *Badalich* and U.S. Patent No. 4,184,755 (“*Burgess*”). The Office Action rejects claim 13 under 35 U.S.C. §103(a) as being unpatentable over *Chao* in view of *Reinhard* and in further view of *Badalich* and U.S. Patent No. 6,561,656 (“*Kojima*”). The Office Action rejects claim 14 under 35 U.S.C. §103(a) as being unpatentable over *Chao* in view of *Reinhard* and in further view of *Badalich* and U.S. Patent No. 6,830,840 (“*Olsen*”). The Office Action rejects claim 15 under 35 U.S.C. §103(a) as being unpatentable over *Chao* in view of *Reinhard* and further view of *Badalich* and *Olsen*. The Office Action rejects claim 16 under 35 U.S.C. §103(a) as being unpatentable over *Chao* in view of *Reinhard* and in further view of *Badalich*, *Gishi*, and *Burgess*. The Office Action reject claims 7, 11, and 12 as being dependent upon a rejected base claim, but indicates that claims 7, 11, and 12 would be allowable if rewritten in independent form to include all limitations of the base claims and all intervening claims. Applicants believe all pending claims are allowable over the art of record and respectfully request reconsideration and allowance of all claims.

### Prior Art Objections

The Office Action rejected the invention defined by claim 1 as obvious over a combination of *Chao* in view of *Reinhard* and *Badalich*. Claim 1 requires a top face lid that is hinged at one edge of the cube to be positionable at a plurality of angles between a closed position and an open perpendicular position. The lid has an interior mirrored surface capable of reflecting and projecting

an image produced by the device. The angle at which the image is projected can be altered by a user by altering the positioning of the lid of the device. For example, as can be seen for example by Figure 7, when the lid is positioned at approximately 45 degrees, the image is projected approximately horizontally, for example onto a wall. The precise angle at which the image is projected may be adjusted by altering the angle of the lid and thus the angle of the mirror, for example to adjust the precise positioning of the image on the wall. In addition, when the lid is fully opened the image is projected vertically, directly through the open face of the cube without being reflected by the mirrored lid (Le. the mirror is taken out of the optical path of the projected image). This allows for example an image to be projected onto the ceiling. Thus, the present invention allows an image to be projected at a wide range of angles.

In contrast, the device of *Chao* does not teach or suggest a hinged top face lid as claimed by present claim 1. As can be seen from the examples of Figures 1 and 2, the projector of *Chao* is provided with a mirror 7,17 at the opening of the casing 10,20 through which the image is projected. The mirror 7,17 reflects the image as it is projected by the device. The Office Action argues in paragraph 3 that *Chao* has a hinged top face lid. However, the Office Action is not correct in saying this. There is in fact no teaching or suggestion in *Chao* that the mirror 7,17 is hinged allowing the user to change the angle at which the image is projected and thereby change the position of the image on say a wall, as required by the claim 1. Instead the angle of the mirror 7,17 appears to be fixed at the time of manufacture of the device, in accordance with the projection system and lenses, to give a horizontal (only) projection of the image. Indeed, a simple inspection of Figures 1 and 2 of *Chao* shows that the projection system is intended only to project images approximately horizontally and does not show any means by which the mirror may be hinged. The only mention of the arrangement of the mirror in the description of *Chao* comes at column 1, lines 54 to 69, which merely lists the mirror 7 as a component of the device; and at column 2, lines 4 to 10, which says that "at the opening of the casing 20, place a reflection mirror 17". Thus there is no teaching in *Chao* of a hinged mirrored lid that is positionable at a plurality of angles between a closed position and an open perpendicular position, the image being projectable at various angles from vertical to horizontal according to said positioning of the top face lid as required by claim 1. In addition, there is no teaching or suggestion in *Reinhard* or *Badalich* of this feature. Accordingly, for at least this reason, the invention of present claim 1 is not obvious over the cited prior art.

In addition, the lid being hinged about an edge of the cube in claim 1 is not taught by the prior art and has advantages. The hinge arrangement of the top face lid recited in present claim 1

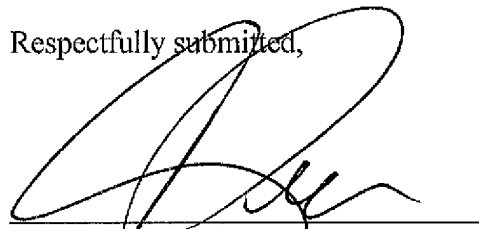
allows the top face lid to be fully closed (i.e. to act as a lid for the device), which in effect gives the device the form of a sealed box, which may be useful for transporting or storing the device when not in use, and protecting the interior of the device from damage and dust etc when not in use. Even assuming the mirror 7,17 of *Chao* was movable, it would not be capable of acting as a lid for the device to form the device into a cube shape, since it is not the correct size and is not attached to an edge of the box (see Figure 3 of *Chao*). Another advantage of the present invention of having the hinge at an edge of the cube is that this allows the entire face of that cube to be "opened up" when the lid is put in the open position, which allows an image to be projected vertically through the face without being reflected by the mirror (i.e. the mirrored face can be moved out of the optical path of the image allowing the image to be projected directly onto the ceiling). This arrangement is not taught or suggested by *Chao*. Thus, for these reasons also, the present invention of claim 1 is allowable over the cited prior art. Additionally, for at least these reasons, dependent claims 2-6, 8-10, and 13-15 are allowable over the cited art.

Claim 16 has similar distinctions over the prior art as claim 1 and is therefore allowable for similar reasons.

### III. CONCLUSION

If any fees are inadvertently omitted or if any additional fees are required or have been overpaid, please appropriately charge or credit those fees to Conley Rose, P.C. Deposit Account Number 03-2769. If any extensions are necessary to process this request, such extensions are hereby requested.

Respectfully submitted,



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